

Trauma

Institution: Vanderbilt University Medical Center

Duration: 4 weeks

Supervising Physician: Oscar Guillaumondegui

Contact Information: 615-480-1149 (24h/7d)

Year of Training: PGY-1

Educational Objectives:

Introduction:

Vanderbilt University Hospital provides trauma care for 65,000 square miles. The Division of Trauma at Vanderbilt University Hospital handles over 4,000 acute trauma admissions annually. Essential for the quality of trauma care provided by Vanderbilt University Hospital are its facilities. These include a 20-bed burn unit, a 31 bed integrated Acute and Sub Acute care unit, which contains a 14 bed ICU, a 7 bed Acute Admission Area and a 10 bed Sub-Acute unit, and LifeFlight, an active air medical transport program. The Trauma Units' unique geography allows close integration and management of patient progress from admission to discharge. LifeFlight provides rapid access to the tertiary care facilities of the Trauma Center for all patients within a 140-mile radius of Nashville.

With over a 3 decades of active service, the LifeFlight helicopters make over 2000 flights annually. LifeFlight and the Stallworth Rehabilitation Center allow patients to remain within the Vanderbilt system from the time of injury until their return to work. The trauma program at Vanderbilt is unique in that surgical residents gain exposure to the problems of both urban and rural trauma care. This comprehensive approach to trauma care and surgical critical care provides powerful research and educational opportunities for residents interested in a career in trauma surgery or surgical critical care. In addition to the active clinical program, the division supports injury prevention, ongoing research opportunities, and continuing medical education programs for Advanced Trauma Life Support and Pediatric Advanced Life Support.

Patient Care and Procedural Skills:



- ✓ Emergency Department: The PGY 1 will carry out the initial assessment and initiate management of injured patients, under the supervision of the PGY 2 PGY IV, Trauma Fellow, and/or Attending. Leadership, prioritization, and decision-making skills are fostered.
- ✓ Operating Room: The PGY I will, under the supervision of the attending surgeon, assist and participate to an appropriate degree in the surgical management of trauma patients. Conceptual issues are emphasized in the operating room; e.g. the strategy of a celiotomy for blunt trauma and the general stepwise plan of the operation. Fundamental technical skills are acquired and refined.
- ✓ Intensive care unit: Under the supervision of the PGY II, PGY IV, Trauma Fellow, and/or the attending surgeon, the PGY I will actively participate in the assessment and resuscitation of critically ill trauma patients in the intensive care unit. Critical analysis skills are emphasized.
- ✓ Stepdown/Regular floor: The PGY I will assess floor patients and propose management plans to the PGY IV, Trauma ACNP, and/or attending surgeon, to facilitate the graded development of clinical judgment.
- ✓ Post discharge: The PGY I will develop understanding of post injury recovery and return to community life by participating in weekly trauma resident clinic. They participate in this clinic under the supervision of the PGYIV and Trauma Attending
- ✓ The PGY I on the Trauma rotation performs a large number of procedures, ranging from complex wound closure to central line placement, and airway management always under the direction of senior clinicians.

Medical Knowledge:

- ✓ Demonstrates knowledge of work-up and management of peripheral vascular injury
- ✓ Demonstrates knowledge of managing penetrating and blunt neck injury
- ✓ Independent insertion of tube thoracostomies, central venous catheters, arterial monitoring lines
- ✓ Familiarity with endotracheal intubation and intraosseous catheter cannulations
- ✓ Participation in performing percutaneous tracheostomies and bronchoscopies
- ✓ Demonstration of basic ventilator management
- ✓ Demonstrates knowledge on blunt and penetrating torso trauma
- ✓ Demonstrates knowledge on blunt and penetrating extremity injury
- ✓ Demonstrates knowledge on blunt and penetrating traumatic brain injury

- ✓ Demonstrates knowledge on appropriate resuscitation for trauma patients pre-hospital and in the hospital
- ✓ Demonstrates knowledge of Advance trauma life support guidelines
- ✓ Demonstrates knowledge on the initial resuscitation and care of burn and electrical injuries.

Practice-Based Learning and Improvement

- ✓ Write an accurate, detailed, and legible preoperative assessment and counseling note on all patients for which he/she serves as surgeon of record.
- ✓ Utilize assigned journal articles as well as available textbook chapters and information technology (including PubMed search and literature review)
- ✓ Participate in the education of patients, families, students, residents, and other health professionals.
- ✓ Incorporate formative evaluation feedback into daily practice.

Interpersonal and Communication Skills

- ✓ The resident should ensure that the attending is aware of the progress of all patients on the service.
- ✓ The resident should clearly, accurately, and respectfully communicate with nurses, ACNPs, and other Hospital employees.
- ✓ The resident should clearly, accurately, and respectfully communicate with referring and consulting physicians, including residents and Trauma ACNPs.
- ✓ The resident should clearly, accurately, and respectfully communicate with patients and appropriate members with their families about identified disease processes (including complications), the expected courses, operative findings, and operative procedures.
- ✓ The resident should ensure that clear, concise, accurate, and timely medical records are maintained on all patients.
- ✓ The resident should be able to clearly and accurately teach medical students about the procedures performed on this rotation when qualified to do so by hospital and program policy.
- ✓ The PGY I will critique and refine assessment and management skills by participating in daily teaching rounds,
- ✓ Attendance at the Monday multidisciplinary Trauma/ED video review conference.
- ✓ In order to provide continuity of care, assess outcomes, and gain experience in patient management, all R1s on trauma when assigned to the day shift will attend outpatient clinic one half-day per week
- ✓ Expected to help orient medical students and provide them support as needed for their roles and responsibilities throughout the rotation.
- ✓ Expected to teach level-appropriate skills to medical students (e.g. history and physical skills, postoperative patient care, knot-tying).
- ✓ Expected to provide timely feedback and assessments to the clerkship director and medical student supervisor as requested.

Professionalism

- ✓ Demonstrate compassion, integrity, and respect for others.
- ✓ Demonstrate sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.
- ✓ Demonstrate sensitivity to issues of age, race, gender, and religion with patients, family, and members of the healthcare team.
- ✓ Demonstrate respect for patient privacy and autonomy.
- ✓ Remain honest with all individuals at all times in conveying issues of patient care.
- ✓ Respond to the needs of the patient above one's own needs and desires.
- ✓ Maintain high standards of ethical behavior in all professional activities.
- ✓ Demonstrate a commitment to the continuity of patient care to carrying out professional responsibilities or through assuring that those responsibilities are fully and accurately conveyed others acting in his/her stead.
- ✓ Understand the institutional policy on duty hours and remain compliant with all duty hour regulations. Residents must enter the number of hours spent in the hospital into the tracking system weekly.
- ✓ Be properly and professionally attired at all times while engaged in patient care.
- ✓ At all times treat patients, families, and all members of the healthcare team with respect.
- ✓ Reliably be present in prearranged places at prearranged times except when actively engaged in the treatment of a medical or surgical emergency. The resident must notify the appropriate supervisor if he or she will be unable to be present.
- ✓ Remain compliant with all required training designated by the institution.

Systems-based practice

- ✓ The resident should be able to assess the risks and benefits of all options for treating patients with surgical illness.
- ✓ The resident should be able to summarize the financial costs, potential complications, and long-term expectations for planned procedures.
- ✓ The resident should recognize the differences between the three hospital systems in which he or she will participate: federal, university, and private.
- ✓ The resident should be able to determine the benefit of additional treatment by other services such as plastic surgery, interventional radiology, and orthopedics.
- ✓ The resident should be able to determine and convey to appropriate individuals the instruments and other materials necessary for all procedures.
- ✓ The resident should be able to work closely with case management in developing and implementing disposition plans for the trauma service patients

Description of Clinical Experiences:

Specific daily responsibilities of the PGY-1 Resident(s) include:

- ✓ For Day residents, 24h History & Physical of all ICU (T1) Patients
- ✓ For Night residents, 24h History & Physical of all Stepdown (T2) Patients
- ✓ Completion of all Stepdown (T2) daily progress notes before AM conference checkout with required daily progress notes for all patients with ED arrival times (not documentation time) before midnight
- ✓ Ensuring timely communication of all new Level III Trauma consultations to PGY-4, Trauma Fellow, and/or Trauma Attending, especially near shift-change
- ✓ Ensuring timely communication and order-entry for all new admissions with patient hand-off to appropriate ACNP provider in ICU (T1), Stepdown (T2), or ward service (T3)
- ✓ Presence at all Trauma Level I and II alerts, with optimal response time prior to patient arrival
- ✓ History & Physical documentation of all Level II/III Trauma Alerts and electronic routing to the correct attending provider
- ✓ Physical examination (e.g., clavicle to feet, back) and verbal clear call-out for room (initial assessment and secondary survey for trauma, per Advanced Trauma Life Support guidelines)
- ✓ Wearing personal protective equipment (PPE) during all Trauma Resuscitations, bedside procedures, and operating room cases; Ownership of all sharp-disposals
- ✓ Shift-dependent presence and participation in weekly trauma clinic, daily AM checkout conference, shift-change patient care hand-off, and AM rounds
- ✓ Keeping individual patient summaries up-to-date (history, injury, traumagram and imaging results, procedures, consultations with recommendations, dispositions)
- ✓ Initiating electronic consultation request for any patient immediately, with ideal method of verbal and/or face-face communication
- ✓ Responsibility for order execution (e.g., order entry, follow-up)
- ✓ Completion of procedures with appropriate supervision by PGY-4, Fellow, and/or Trauma Attending
- ✓ Communication of any and all uncertainty in patient-care plans to ACNP, PGY-4, Fellow, and/or Trauma Attending

Description of Didactic Experiences:

- ✓ Trauma morning report. This will be a 1 hour daily conference that reviews all trauma admissions, acute issues for patients on service. Education will be provided by attending faculty, fellows and senior residents. Occurs daily at 0700 in the 10North Conference Room
- ✓ Monthly Trauma Morbidity and mortality for the Trauma Division. Occurs 3rd Wednesday of the month at 1200 in the trauma division conference room
- ✓ Monthly Trauma morbidity and mortality for the Department of Surgery. Occurs the 4th Wednesday of the month at 0630 in Light Hall
- ✓ Weekly Trauma Video resuscitation review with Trauma, Emergency Medicine and pre-hospital personnel. Occurs at 1100 weekly in Oxford House

Evaluation Process:

Faculty and senior residents will evaluate the performance of each resident using these goals and objectives. Each resident on the service will evaluate the rotation, the service, faculty and any senior residents also on the rotation.

